

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancel)

2. (Currently Amended) The method of claim 1-6 wherein the ~~first access point~~ informing of the one or more mobile units includes ~~broadcasting~~ a message ~~to its associated mobile units~~ by the first access point to inform the ~~associated one or more~~ mobile units of its compression capability.

3. (Currently Amended) The method of claim 1-6 wherein the ~~first access point~~ informing of the one or more mobile units includes ~~sends~~ sending a test frame by the first access point to a newly associated mobile unit of the one or more mobile units to inform the newly associated mobile unit of its compression capability.

4. (Currently Amended) The method of claim 1-6 wherein the ~~first access point~~ informing of the one or more mobile units includes ~~informs~~ informing the one or more mobile units of specific data compression schemes that are supported by the first access point.

5. (Currently Amended) The method of claim 1-6 wherein the ~~first mobile unit informs the first access point of its compression capability~~ by informing of the first access point includes sending compressed data to the first access point by the first mobile unit.

6. (Currently Amended) A method comprising:  
informing one or more mobile units within a wireless network that a first access point is capable of handling data compression;  
informing the first access point that a first mobile unit is capable of handling compression;  
optionally compressing data at the first mobile unit prior to transmitting the data to the first access point, ~~comprises: the first mobile unit~~ by deciding whether to compress the data

based upon at least one factor selected from the group consisting of a first factor indicating whether the first access point is capable of handling data compression, a second factor indicating whether the first mobile unit can perform data compression according to one or more specific compression schemes that are supported by the first access point, a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, a fourth factor indicating how much data ~~are~~is waiting in a queue to be transmitted, a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that ~~are~~is waiting to be transmitted, ~~and~~ a sixth factor indicating whether the type of the data to be compressed is suitable for data compression, a seventh factor indicating whether previous compression gain exceeds a second threshold level, and an eighth factor indicating a relative computational power of the first mobile unit to be used for data compression tasks; and

optionally compressing data at the first access point prior to transmitting the data to the first mobile unit.

7. (Currently Amended) The method of claim ~~4~~8 wherein the informing of the first access point includes a first mobile unit informings the first access point of its compression capability by sending a message to the first access point.

8. (Currently Amended) A method comprising:

informing one or more mobile units within a wireless network that a first access point is capable of handling data compression;

informing the first access point that a first mobile unit is capable of handling compression;

optionally compressing data at the first mobile unit prior to transmitting the data to the first access point; and

optionally compressing data at the first access point prior to transmitting the data to the first mobile unit, ~~comprises: the first access point~~ by deciding whether to compress the data based upon at least one factor selected from the group consisting of a first factor indicating whether the first mobile unit is capable of handling data compression, a second factor

indicating whether the first access point can perform data compression according to one or more specific compression schemes that are supported by the first mobile unit, a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, a fourth factor indicating how much data ~~are~~is waiting in a queue to be transmitted, a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that ~~are~~is waiting to be transmitted, ~~and~~ a sixth factor indicating whether the type of the data to be compressed is suitable for data compression, a seventh factor indicating whether previous compression gain exceeds a second threshold level, and an eighth factor indicating a relative computational power of the first access point to be used for data compression tasks.

9. (Cancelled).

10. (Cancelled).

11. (Currently Amended) The method of claim ~~10~~17 wherein the one or more factors considered by the first access point include a ~~first~~ factor indicating whether the first mobile unit is capable of handling data compression.

12. (Currently Amended) The method of claim ~~10~~17 wherein the one or more factors considered by the first access point include a ~~second~~ factor indicating whether the first access point can perform data compression according to one or more specific compression schemes that are supported by the first mobile unit.

13. (Currently Amended) The method of claim ~~10~~17 wherein the one or more factors considered by the first access point include a ~~third~~ factor indicating whether the size of data to be transmitted exceeds a first threshold level.

14. (Currently Amended) The method of claim ~~10~~17 wherein the one or more factors considered by the first access point include a ~~fourth~~ factor indicating how much data ~~are~~is waiting in a queue to be transmitted.

15. (Currently Amended) The method of claim ~~40~~17 wherein the one or more factors considered by the first access point include a ~~fifth~~ factor indicating a relative position of the data to be compressed with respect to other data in the queue that ~~are~~is waiting to be transmitted.

16. (Currently Amended) The method of claim ~~40~~17 wherein the one or more factors considered by the first access point include a ~~sixth~~ factor indicating whether the type of the data to be compressed is suitable for data compression.

17. (Currently Amended) A method comprising:

a first access point in a wireless network communicating to a first mobile unit to inform the first mobile unit that the first access point is capable of handling data compression, the first access point determines whether to compress data based upon one or more factors being indicative of whether the benefit to be obtained from transmitting compressed data exceeds the cost associated with compressing the data, the one or more factors considered by the first access point include a factor indicating whether previous compression gain exceeds a second threshold level;

the first mobile unit, upon being informed that the first access point is capable of handling data compression, optionally transmitting data in compressed format to the first access point; and

the first access point, upon receiving compressed data from the first mobile unit which indicates to the first access point that the first mobile unit is capable of handling data compression, optionally transmitting data in compressed format to the first mobile unit.

18. (Currently Amended) The method of claim ~~40~~17 wherein the one or more factors considered by the first access point include an ~~eighth~~ factor indicating a relative computational power of the first access point to be used for data compression tasks.

19. (Cancelled).

20. (Currently Amended) The method of claim ~~19~~26 wherein the one or more factors considered by the first mobile unit include a ~~first~~-factor indicating whether the first access point is capable of handling data compression.

21. (Currently Amended) The method of claim ~~19~~26 wherein the one or more factors considered by the first mobile unit include a ~~second~~-factor indicating whether the mobile unit can perform data compression according to one or more specific compression schemes that are supported by the first access point.

22. (Currently Amended) The method of claim ~~19~~26 wherein the one or more factors considered by the first mobile unit include a ~~third~~-factor indicating whether the size of data to be transmitted exceeds a first threshold level.

23. (Currently Amended) The method of claim ~~19~~26 wherein the one or more factors considered by the first mobile unit include a ~~fourth~~-factor indicating how much data are waiting in a queue to be transmitted.

24. (Currently Amended) The method of claim ~~19~~26 wherein the one or more factors considered by the first mobile unit include a ~~fifth~~-factor indicating a relative position of the data to be compressed with respect to other data in the queue that are waiting to be transmitted.

25. (Currently Amended) The method of claim ~~19~~26 wherein the one or more factors considered by the first mobile unit include a ~~sixth~~-factor indicating whether the type of the data to be compressed is suitable for data compression.

26. (Currently Amended) A method comprising:  
a first access point in a wireless network communicating to a first mobile unit to inform the first mobile unit that the first access point is capable of handling data compression;  
the first mobile unit, upon being informed that the first access point is capable of handling data compression, optionally transmitting data in compressed format to the first access point, the first mobile unit determines whether to compress data based upon one or

more factors being indicative of whether the benefit to be obtained from transmitting compressed data exceeds the cost associated with compressing the data and including a factor indicating whether previous compression gain exceeds a second threshold level; and

the first access point, upon receiving compressed data from the first mobile unit which indicates to the first access point that the first mobile unit is capable of handling data compression, optionally transmitting data in compressed format to the first mobile unit.-

27. (Currently Amended) The method of claim ~~19-26~~ wherein the one or more factors considered by the first mobile unit include ~~an eighth~~ a factor indicating a relative computational power of the first mobile unit to be used for data compression tasks.

28. (Cancelled).

29. (Currently Amended) The access point of claim ~~28-35~~ wherein the logic to inform comprises:

logic to broadcast the access point's compression capability to the one or more mobile units.

30. (Currently Amended) The access point of claim ~~28-35~~ wherein the logic to inform comprises:

logic to send a test frame to a particular mobile unit to inform that particular mobile unit of the access point's compression capability.

31. (Currently Amended) The access point of claim ~~28-35~~ wherein information regarding the access point's compression capability further includes information indicating specific types of compression schemes that are supported by the access point.

32. (Currently Amended) The access point of claim ~~28-35~~ wherein the logic to determine whether a particular mobile unit is capable of handling data compression comprises:

logic to identify whether a data frame received from the particular mobile unit is compressed.

33. (Currently Amended) The access point of claim ~~28-35~~ wherein the logic to optionally transmit compressed data frames comprises:

logic to decide whether to compress one or more particular frames prior to transmitting the one or more particular frames to a particular mobile unit; and

logic to compress the one or more particular data frames upon deciding that the one or more particular data frames should be compressed.

34. (Currently Amended) The access point of claim ~~28-35~~ wherein the logic to decide whether to compress including:

logic to determine whether a compression threshold is met based upon one or more factors being indicative of whether the one or more particular data frames to be transmitted should be compressed prior to transmission.

35. (Currently Amended) An ~~The~~ access point of claim ~~34~~ wherein in a wireless local area network comprising:

logic to inform one or more mobile units operated within the network that the access point is capable of handling compression;

logic to determine whether a mobile unit is capable of handling compression; and

logic to transmit data frames in compressed format to the mobile unit that is capable of handling compression, the logic includes logic to decide whether to compress one or more frames prior to transmitting the one or more frames to the mobile unit by determining whether a compression threshold is met based upon the one or more factors considered by the access point ~~include~~ including (i) a first factor indicating whether the particular mobile unit is capable of handling data compression, (ii) a second factor indicating whether the access point can perform data compression according to one or more specific compression schemes that are supported by the particular mobile unit, (iii) a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, (iv) a fourth factor indicating how much data are waiting in a queue to be transmitted, (v) a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that are waiting to be transmitted, and (vi) a

sixth factor indicating whether the type of the data to be compressed is suitable for data compression, (vii) a seventh factor indicating whether previous compression gain exceeds a second threshold level, and (viii) an eighth factor indicating a relative computational power of the access point to be used for data compression tasks.

36. (Currently Amended) A mobile unit operated within a wireless local area network, comprising:

logic to determine whether a ~~particular~~an access point with which the mobile unit is associated is capable of handling compression; and

logic to ~~optionally~~ transmit data in a compressed format to the ~~particular~~ access point based upon analysis of one or more of the following factors including a first factor indicating whether the access point is capable of handling data compression, a second factor indicating whether the mobile unit can perform data compression according to one or more specific compression schemes that are supported by the access point, a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, a fourth factor indicating how much data are waiting in a queue to be transmitted, a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that are waiting to be transmitted, a sixth factor indicating whether the type of the data to be compressed is suitable for data compression, a seventh factor indicating whether previous compression gain exceeds a second threshold level, and an eighth factor indicating a relative computational power of the mobile unit to be used for data compression tasks.

37. (Original) The mobile unit of claim 36 wherein the logic to determine comprises:  
logic to detect a broadcast message transmitted by the particular access point that informs one or more mobile units within the network of the access point's compression capabilities.

38. (Original) The mobile unit of claim 36 wherein the logic to determine comprises:  
logic to identify a test data frame from a particular access point with which the mobile unit is associated, the test data frame being used to inform the mobile unit of the access point's compression capabilities.



39. (Original) The mobile unit of claim 36 wherein the logic to optionally transmit data in compressed format comprises:

logic to decide whether to compress one or more particular data frames prior to transmitting the one or more particular frames to a particular access point; and

logic to compress the one or more particular data frames upon deciding that the one or more particular data frames should be compressed.

40. (Original) The mobile unit of claim 36 wherein the logic to decide whether to compress including:

logic to determine whether a compression threshold is met based upon one or more factors being indicative of whether the one or more particular data frames to be transmitted should be compressed prior to transmission.

41-48. (Cancelled).

49. (Currently Amended) A wireless local area network comprising:

a plurality of electronic devices including a first device and a second device wherein the first device and the second device are configured to inform each other of whether they are capable of handling data compression, the first device and the second device, upon knowing that the other unit is capable of handling data compression, optionally compress data prior to transmitting the data to each other, the first device, in deciding whether to send data in compressed format to the second device, considers one or more factors, the factors including a first factor indicating whether the second device is capable of handling data compression, a second factor indicating whether the first device can perform data compression according to one or more specific compression schemes that are supported by the second device, a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, a fourth factor indicating how much data are waiting in a queue to be transmitted, a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that are waiting to be transmitted, ~~and~~ a sixth factor indicating whether the type of the data to be compressed is suitable for data compression, a seventh factor indicating whether previous

compression gain exceeds a second threshold level, and an eighth factor indicating a relative computational power of the first device to be used for data compression tasks.

50. (Currently Amended) A wireless local area network comprising:  
a plurality of electronic devices including a first device and a second device wherein the first device and the second device are configured to inform each other of whether they are capable of handling data compression, the first device and the second device, upon knowing that the other unit is capable of handling data compression, optionally compress data prior to transmitting the data to each other, the second device, in deciding whether to send data in compressed format to the first device, considers one or more factors, the factors including a first factor indicating whether the first device is capable of handling data compression, a second factor indicating whether the second device can perform data compression according to one or more specific compression schemes that are supported by the first device, a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, a fourth factor indicating how much data are waiting in a queue to be transmitted, a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that are waiting to be transmitted, ~~and~~ a sixth factor indicating whether the type of the data to be compressed is suitable for data compression, a seventh factor indicating whether previous compression gain exceeds a second threshold level, and an eighth factor indicating a relative computational power of the second device to be used for data compression tasks.

51. (Cancel)

52. (Cancel)

53. (Cancel)

54. (Cancel)

55. (Cancel)

56. (Previously Presented) A machine-readable medium comprising instructions which, when executed by a machine, cause the machine to perform operations comprising:

informing one or more mobile units within a wireless network that a first access point is capable of handling data compression;

informing the first access point that a first mobile unit is capable of handling compression;

optionally compressing data at the first mobile unit prior to transmitting the data to the first access point, comprises:

the first mobile unit deciding whether to compress the data based upon at least one factor selected from the group consisting of a first factor indicating whether the first access point is capable of handling data compression, a second factor indicating whether the first mobile unit can perform data compression according to one or more specific compression schemes that are supported by the first access point, a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, a fourth factor indicating how much data are waiting in a queue to be transmitted, a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that are waiting to be transmitted, and a sixth factor indicating whether the type of the data to be compressed is suitable for data compression, a seventh factor indicating whether previous compression gain exceeds a second threshold level, and an eighth factor indicating a relative computational power of the first mobile unit to be used for data compression tasks; and

optionally compressing data at the first access point prior to transmitting the data to the first mobile unit..

57. (Previously Presented) A machine-readable medium comprising instructions which, when executed by a machine, cause the machine to perform operations comprising:

informing one or more mobile units within a wireless network that a first access point is capable of handling data compression;

informing the first access point that a first mobile unit is capable of handling compression;

optionally compressing data at the first mobile unit prior to transmitting the data to the first access point; and

optionally compressing data at the first access point prior to transmitting the data to the first mobile unit, comprises the first access point deciding whether to compress the data based upon at least one factor selected from the group consisting of a first factor indicating whether the first mobile unit is capable of handling data compression, a second factor indicating whether the first access point can perform data compression according to one or more specific compression schemes that are supported by the first mobile unit, a third factor indicating whether the size of data to be transmitted exceeds a first threshold level, a fourth factor indicating how much data are waiting in a queue to be transmitted, a fifth factor indicating a relative position of the data to be compressed with respect to other data in the queue that are waiting to be transmitted, and a sixth factor indicating whether the type of the data to be compressed is suitable for data compression, a seventh factor indicating whether previous compression gain exceeds a second threshold level, and an eighth factor indicating a relative computational power of the first access point to be used for data compression tasks.